



**PWMA-230**  
***OPERATING INSTRUCTIONS***

**SINGLE VHF WIRELESS BATTERY POWERED  
PA SYSTEM WITH ECHO**

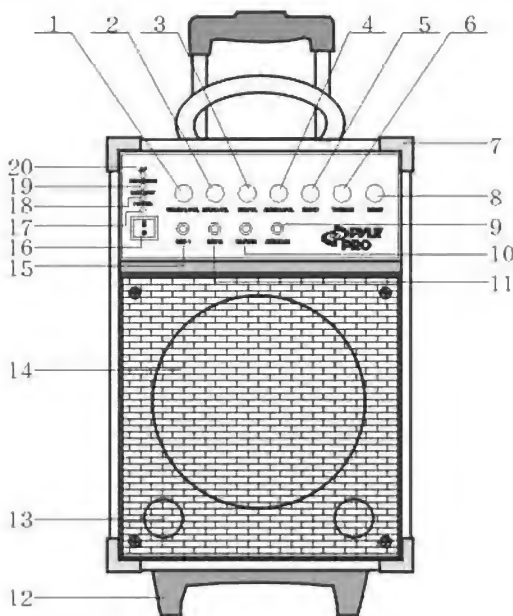


1. It is consist of one set of wireless and two wired microphone input circuits, both of them has separated volume control.
2. VHF high band wireless transmitter and receiver
3. It is equipped with built-in 4AH/12V rechargeable battery which can be charged 6 hours continuously, also DC power can be used directly.
4. One guitar input function and one audio input unit both are supplied.
5. Treble and bass control are supplied.
6. Echo control is supplied.
7. With voltage selector switch for selecting a suitable one according to different countries.

## REMARKS

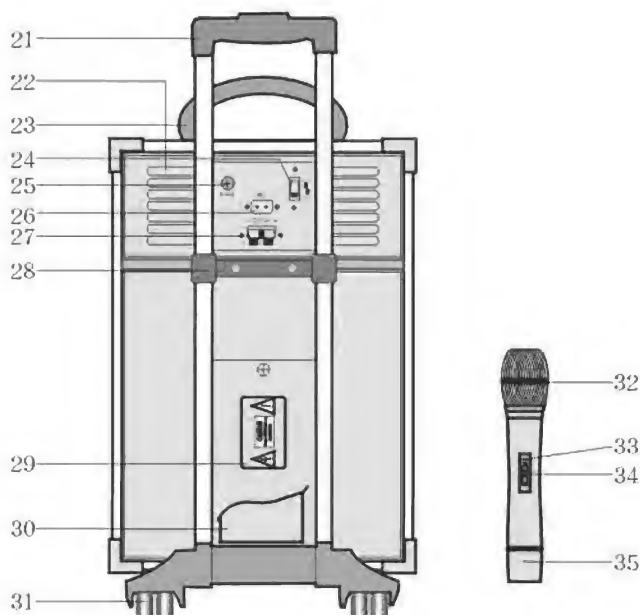
1. Correct power must be used, don ' t use any other power except the specified one.
2. Don ' t drag the power cable when pull out the plug, just hold the plug to pull it out from socket.
3. Don ' t open chassis; it is very dangerous either open the chassis or put your hand inside the chassis, don ' t do it. If the device is not under normal working, pull out the plug at once and contact your retailer or the nearest distributor.
4. Don ' t take volatile solvent such as toluene, alcohol, gasoline to clean the surface.
5. Please don ' t put it in an unventilated environment or at direct sunlight in summer.
6. Avoid moisture or rain.

- |                                     |  |
|-------------------------------------|--|
| 1. Wireless Mic/MIC1 Volume Control | 11. MIC2 Input Jack                      |
| 2. MIC2 Volume Control              | 12. Fixed stand for the unit             |
| 3. Guitar Volume Control            | 13. Vent Hole                            |
| 4. Audio Volume Control             | 14. Woofer Speaker                       |
| 5. Echo Control                     | 15. MIC1 Input Jack                      |
| 6. Treble Control                   | 16. Power Switch                         |
| 7. Metal Corner                     | 17. Power Indicator                      |
| 8. Bass Control                     | 18. Low Voltage Indicator                |
| 9. Audio Input Jack                 | 19. Charge Indicator                     |
| 10. Guitar Input Jack               | 20. Therefore Indicator For Wireless Mic |



## SYSTEM FUNCTIONS FIGURE

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 21. Trailer Handle              | 29. Rechargeable Battery Cover      |
| 22. Heating Pane                | 30. 4AH/12V Rechargeable Battery    |
| 23. Handle                      | 31. Truckle Of Trailer              |
| 24. Voltage Selector Switch     | 32. Mic Head                        |
| 25. Ac Fuse                     | 33. RF Indicator Of Handheld Mic    |
| 26. 2PIN Power Socket           | 34. Power Switch Of Handheld Mic    |
| 27. External DC Input Jack      | 35. Battery Housing Of Handheld Mic |
| 28. Fixed Stand For The Trailer |                                     |



## 1. Confirm the power

- ① AC Power: Before operation, please confirm the voltage is same as the specified one marked on the label. If not, the unit will be damaged.
- ② Built-in Rechargeable Battery: You needn't plug-in the AC power when the voltage for rechargeable battery is enough but use the battery directly.
- ③ When the Low Voltage Indicator comes on yellow, it indicates the battery voltage is not enough, please charge it in time.
- ④ When the Low Voltage Indicator comes out, it indicates the voltage is standard now.
- ⑤ If the unit is not used for a long time, please charge the rechargeable battery every 2 months, 8-10 hours for each time.

## 2. Operation Instructions:

- ① Plug the power cable into the socket and connect it with this amplifier system.
- ② Switch on the amplifier, the Power Indicator comes on red.
- ③ Put a 9V battery into handheld microphone  
push the Power Switch to middle, the Power Indicator will flash once, RF Indicator comes on green, the speakers are quiet.
- ④ Push the Power Switch of handheld microphone  
to ON position, your sound can be heard from amplifier when speaking. Adjust the Volume Control/Echo Control/Treble Control/Bass Control to proper position to avoid feedback.
- ⑤ If the Power Indicator of handheld microphone  
comes on at all times, it indicates the battery lack of power, please replace the battery.
- ⑥ Connect relative cable of guitar with Guitar Input Jack on this system, you can play wonderful music.

## INSTRUCTIONS

### 3. Wireless Microphone:

- ① Two way wired microphone input jacks are supplied for two people use simultaneously.
- ② Plug wireless microphones into the jacks separately.
- ③ Adjust Echo Control to get better sound.
- ④ Adjust the volume of each microphone to make sure the sound is satisfactory.

## PARAMETER

### AMPLIFIER

Power supply:	<input type="checkbox"/> AC220V/50Hz <input type="checkbox"/> AC110V/60Hz including a built-in 12V4AH rechargeable battery
Frequency response:	35Hz-20KHz
SPL:	94dB (1W/M)
T.H.D:	<1%
Input wired mic:	-58dBV 600
Speaker:	8" woofer,
RMS power:	100W
Input jack:	2 × 1/4" wired mic jack, 1 × 1/4" GUITAR IN jack 1 × Audio/Video input jack

### RECEIVER

Carrier frequency range:	177-205 Mhz.
RF sensitivity:	≤ -101dB
Image rejection:	≥ 60dB
S/N ration:	≥ 65dB
Operation range:	100 ft

## PARAMETER

### TRANSMITTER

Carrier frequency range:	177-205 MHz
RF power output:	$\leq 10\text{mW}$
Modulation level:	15K
Operation temperature:	-18°C-60°C
Power supply:	9V
Unit Battery Life:	Approx.5 Hours
Mic Battery Life:	Approx. 45 Hours